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COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

VERBATIM RECORD OF THE THREE HUNDRED AND FIFTY-SIXTH MEETING

Held at Graz, Austria,
on Thursday, 30 May 1991, at 10.30 a.m.

Chairman: Mr. HOHENFELLNER (Austria)

- Attendance by non-members of the Committee (continued)
- Ways and means of maintaining outer space for peaceful purposes (continued)
- Report of the Scientific and Technical Subcommittee on the work of its twenty-eighth session
- Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space

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The meeting was called to order at 10.50 a.m.

ATTENDANCE BY NON-MEMBERS OF THE COMMITTEE (continued)

The CHAIRMAN: I should like to inform members that notes verbales have been received from the Permanent Representatives of Peru and Thailand in which they request permission to attend the current session of the Committee on the Peaceful Uses of Outer Space as observers. I should like to suggest that, in conformity with past practice, we invite the delegations of those countries to attend the current session of the Committee and to address the Committee, as appropriate. This is, of course, without prejudice to further requests of this nature and does not involve any decision by the Committee concerning status. It is a courtesy we customarily extend to delegations. If there is no objection, we shall proceed accordingly.

It was so decided.

WAYS AND MEANS OF MAINTAINING OUTER SPACE FOR PEACEFUL PURPOSES (continued)

Mr. FUJITA (Brazil): Although my delegation spoke briefly yesterday on this item, this is a calmer moment for me to reiterate the congratulations expressed by the delegation of Argentina, on behalf of our two delegations, upon your election to the chairmanship of the Committee on the Peaceful Uses of Outer Space. My delegation notes with particular satisfaction that your election reflects not only the recognition of your outstanding qualities as a diplomat, but also the continuation of a long-standing and fruitful tradition of conferring upon your country, Austria, the responsibility of presiding over the Committee. The diplomatic calibre you have shown in so many important bodies of the United Nations, including the Security Council, the Committee on Sanctions and the Conference on Disarmament, as well as the relevant contributions that Austria has made in space activities, all ensure that our Committee will continue to carry out its work in a very constructive manner.

(Mr. Fujita, Brazil)

My delegation also wishes to express its deep appreciation to your distinguished predecessor, Mr. Jankowitsch, for his untiring dedication to the Committee for 20 years, in the course of which many Brazilian representatives had the honour and pleasure of collaborating with him.

A word of gratitude is also in order for the authorities of Austria and the people of Graz for their gracious hospitality.

In its resolution 45/72, the General Assembly once again requested the Committee to consider, as a matter of priority, ways and means of maintaining outer space for peaceful purposes. The priority given by the General Assembly to this item reflects an awareness that the maintenance of peace on Earth is predicated, inter alia, on the maintenance of peace in space. In other words, peace is an integral and interrelated process. Peace is indivisible.

The remarkable improvement of the international political atmosphere in the last few years has paved the way for a new climate of dialogue between States, offering prospects for a world based on cooperation rather than confrontation. But even though a warmer dialogue among the major Powers currently seems to be melting away many of the clichés of the cold war, unfortunately some other clichés remain frozen in the form of anachronistic perceptions. It is therefore urgently necessary that the question of peace be approached in more imaginative ways in order to overcome stereotypes that are incompatible with the new times.

(Mr. Fujita, Brazil)

My delegation believes that COPUOS has a legitimate role to play in the search for ways and means of maintaining outer space for peaceful purposes. One such way is by using what I would call the "critical" approach of enquiring when a given space application is not for peaceful purposes. By critical, I am referring to the philosophical acceptance of carrying out a detailed examination of the fundamental nature of things. So, one may argue, for example, that the militarization of outer space is detrimental and must be prevented at all costs. We could also argue that the advanced space Powers can only seek unilateral military advantages in space at the cost of collective insecurity on Earth. Or, we could say that those space Powers must not divert resources for such military purposes in space that could be used for the benefit of all nations in more pressing fields on Earth.

Other delegations could no doubt argue otherwise, and declare that, on the contrary, militarization may enhance security and hence peace, or some argument along those lines. But be that as it may, what is necessary in any case is a thorough and critical discussion to evaluate whether or not a certain space application is used for peaceful purposes. In this regard, the discussions in the outer space Committee and the Conference on Disarmament may have a most useful complementarity in clarifying the issues and even in demarcating clear areas of competence. But one could not establish beforehand in abstracto where the boundaries lie and rule out cross-fertilization between the two bodies. Therefore, my delegation believes that a coordination exercise between such bodies as this Committee and the Conference on Disarmament should be given an opportunity. Because we are members of both bodies, we understand the need and the usefulness of such coordination, and support all efforts to that end. I would also like to stress that coordination and complementarity are different from duplication, as the first

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two serve to strengthen the role of the relevant bodies, rather than make it redundant. And even here, redundancy may be a useful safety device in some cases.

Another way of maintaining outer space for peaceful purposes is by approaching it in what I would call an "interdependent" way. As it is now increasingly being recognized, peace is not merely the absence of war. It is a broader, dynamic process involving the continuing search for ways to improve the material and spiritual conditions of peoples, inter alia, in the political, economic, social and cultural fields, based on endogenous efforts and international cooperation. In this regard, the enhancement of freedom of thought, freedom of movement and the right to property enjoyed by peoples in pursuit of their well-being entails as a natural extension and necessary complement the free flow of peoples, goods and ideas among nations in all directions.

Peace, therefore, is best promoted by means of cooperative activities for the development of mankind's potential, particularly by means of wide dissemination of scientific and technological knowledge. In this regard, cooperation in outer space, as the outermost frontier of mankind, epitomizes the ontological affirmation of the unity of mankind vis-à-vis the universe. Thus, the commitment of all States to enhance international cooperation in outer space for peaceful purposes by guaranteeing the free flow of all resources is a fundamental condition for ensuring peace by spreading the benefits to ever wider segments on Earth.

As we are all fellow passengers on spaceship Earth, solidarity in development is a requirement dictated by reality in the interest of a safe

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journey for all of us. As was stated so aptly by the Federal Minister for Foreign Affairs of Austria last Monday:

"Solidarity and cooperation in the peaceful uses of outer space, once considered a moral and political postulate, have become a rational necessity." (A/AC.105/PV.351, p.21)

So let us all be Cartesian in our activities in space, and ensure peace on Earth for mankind.

Mr. LAPYTSKY (Ukrainian Soviet Socialist Republic) (interpretation from Russian): First of all, the Ukrainian delegation would like to express its satisfaction at seeing the Committee discussing the issue of ways and means of maintaining outer space for peaceful purposes. The fact that we are discussing this issue, and discussing it as a priority item, shows that it is of great importance and urgency, especially in view of the recent positive changes in international relations. Today, we all realize the threat to our civilization inherent in the reality of modern-day life. However, owing to the new political thinking, the cold war and confrontation are becoming relics of the past. Ways of maintaining security through the use of force and competition between opposing blocs are notions that are losing their former meaning. We have staved off the threat of global war, and the winds of change have led to the formation of new civilized relations between States based on the primacy of law, general human values and endeavours to solve problems through political means.

These growing tendencies are edging out the military use of force as an approach to solving international issues. Moreover, they are undermining the

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very foundations of the long-standing and all-pervasive arms race. All this is creating new prospects for achieving progress in resolving the issue now before us. The Ukrainian delegation believes that the United Nations, and in particular this Committee, should make full use of today's favourable political environment to move forward with determination in maintaining outer space for peaceful purposes. Resolving this issue would greatly enhance the creation of a new international security model based on a balance of interests and mutual trust. It would also remove serious obstacles on the way to a peaceful future for all countries and peoples.

(Mr. Lapytsky, Ukrainian SSR)

We should like to note that the international community already has the foundation upon which we can build and move farther ahead. This foundation was laid, despite the difficulties stemming from the cold war and the military competition between blocs, through the use of such means as the establishment of wide international cooperation in the exploration and use of outer space for peaceful purposes. We have taken a number of steps to develop and implement international legal instruments to limit the use of outer space for military purposes. However, the danger of extending the arms race to outer space remains, and the international community apparently has a long road to cover before we create a reliable legal framework, a legal barrier that would block all ways of militarizing outer space.

We in the Ukraine share the international community's concern over the continued use of outer space for military purposes. I take this opportunity to inform members about our position on this issue, emphasizing that it stems from the declaration of State sovereignty of the Ukraine, adopted on 16 July 1990 in the Supreme Soviet of the Ukraine. We are a peace-loving republic, and therefore believe that outer space should be used exclusively for peaceful purposes. Consequently, we oppose the deployment of any type of weapons in outer space. We wholeheartedly support the idea of banning the use of force in outer space or from outer space against targets on Earth. We believe that the most important principle of international law, namely, the non-use or threat of the use of force, should be implemented both on Earth and in outer space. We are a signatory to the 1967 outer space Treaty and to other outer space agreements. We therefore advocate further broadening of the

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legal framework to govern the space activities of States. We believe this Committee has an important role to play in that regard.

My delegation of course agrees with the granting of special powers to the Conference on Disarmament on the issues relating to the prevention of an arms race in outer space. However, the Conference on Disarmament has achieved scant progress on this issue. That is why we support the idea of establishing contacts between the Conference on Disarmament and the outer space Committee. If we develop cooperation between us, if our activities are complementary, then our two competent bodies would be, we think, jointly able to ensure that we move farther ahead.

The long experiece garnered by the international community demonstrates that the paramount condition for the adoption of programmes to solve issues relating to the limitation and reduction of weapons stockpiles is the building of confidence between the negotiating parties. This conclusion, we believe, could also be fully applied to outer space issues. In that connection, we should like to draw members' attention to the Soviet proposal submitted this year at the first session of the Conference on Disarmament, in which it was suggested that the Conference should consider the notion of confidence-building and predictability in space activities. We believe that that proposal could help make our work to that end even more active and fruitful.

Moreover, we believe that this Committee should exert more energetic efforts. We must consider carefully the idea of developing a comprehensive regime for carrying out work in outer space for peaceful purposes, of setting up a system to monitor the outer space activities of all countries.

(Mr. Lapytsky, Ukrainian SSR)

Consideration and implementation of those measures would effectively promote prevention of the militarization of outer space and use of outer space exclusively for peaceful purposes.

The delegation of the Ukraine is prepared to assist in fruitful and constructive work in the Committee with a view to solving these problems of paramount importance.

Ms. COURTNEY (Australia): At the outset, Sir, let me congratulate you on your assumption of the chairmanship. It goes without saying that, as your alphabetical neighbour, we are aware of your expertise in this and indeed in many other areas. We extend our congratulations also to Mr. Jankowitsch for his impressive track record in presiding over the Committee so well for 20 years. I should also like to take this opportunity to convey to you, Mr. Chairman, and to Mr. Jankowitsch the best wishes of Mr. Carver, the Chairman of the Scientific and Technical Subcommittee.

A book currently in print in the United States of America starts with the following anecdote - apparently a true story: A fire brigade is called to a fire, and when it gets to the source of the smoke it discovers a man asleep in a burning bed. After rescuing him, the firemen are curious to discover the cause of the fire, so they ask him: "Were you smoking in bed? What started it?" He responds: "I don't know. It was on fire when I lay down on it."

In a sense I am emulating that man in choosing to speak under agenda item 6, which has been on fire for a long time. The issues have been debated hotly and repetitively for many years, and as our debate demonstrated yesterday, differences are such that fingers can be burned if we are not too careful in this area. Our reason for addressing the Committee, then, is to examine briefly the question of the relationship between the maintenance of

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outer space for peaceful purposes and the prevention of an arms race in outer space. Logically, this also means looking at the work of, among other forums, the Committee on the Peaceful Uses of Outer Space and the Conference on Disarmament.

That there is an intrinsic connection between the peaceful uses of outer space, on the one hand, and disarmament and security-related questions pertinent to outer space, on the other, is self-evident. The very title of item 6 implies such a connection - maintaining outer space for peaceful purposes. To maintain is to keep and to upkeep. The real question is not whether these issues are related: the real question is how we should deal with the two aspects of this issue, that is, the promotion of the peaceful uses of outer space and the prevention of an arms race in outer space. It is the view of my delegation that aspects most relevant to the first question should be dealt with in this Committee, and aspects most relevant to the second question should be dealt with in the Conference on Disarmament and in other relevant forums.

It is not, of course, possible to draw a black line between the subject matter under discussion. Inevitably, activities in space will have dual aspects. How, for example, does one define a peaceful purpose? A military satellite responsible for verifying arms control treaties is arguably a peaceful application, although opinions on this may vary. And how do we cope with a military satellite, which may also perform other functions that are not, by that same definition, peaceful? This is an extremely complex area, which is one of the reasons why the Committee has not found it possible to reach agreement on how to cope with this particular agenda item.

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Because of this so-called grey area or overlap of responsibility, we will continue in our work in the Conference on Disarmament and here in the Committee on the Peaceful Uses of Outer Space to find that aspects of one issue may impinge on the other. The 1967 outer space Treaty, which was negotiated in the Committee on the Peaceful Uses of Outer Space, has a substantial disarmament component.

Space debris, at present a subject of discussion within the Committee although not yet on its agenda, also has a disarmament-related aspect. A large percentage of space debris derives from the deliberate destruction of satellites for purposes of ASAT (anti-satellite-weapon) testing, and so on. On the other hand, proposals made in the Conference on Disarmament will necessarily affect the Committee's work. For example, there is a proposal in the Conference on Disarmament to establish a set of "rules of the road" for space users which, if pursued, would have implications for various areas of our work, including space transportation systems. Confidence-building measures in outer space could also conceivably be of relevance to our work.

This kind of thing, however, should not concern us overduly. The two bodies can easily pursue their primary roles without necessarily dividing everything neatly into two exclusive piles. By analogy, take the example of our own Committee. We have two separate subcommittees that deal with space questions, but from two different perspectives, the legal and the scientific and technical. The subject that most concerns us in the Committee, and I think that we are all in agreement on this, is the peaceful application of outer space activities, and we should recall that progress in enhancing international cooperation in that area will naturally enhance international peace and security as well and will, in all likelihood, have a collateral

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effect on disarmament and disarmament-related negotiations. It is equally obvious, however, that we cannot hope to solve in the Committee problems that are proving difficult to solve in the Conference on Disarmament. For our part, we strongly support those negotiations in the Conference on Disarmament and would like to see its work intensified in that connection. We do not, however, think that this can be achieved through the Committee on the Peaceful Uses of Outer Space. Here in the Committee, we would like to see an intensification in work on the peaceful applications of outer space.

In the context of the work of the two bodies it is also worth noting that neither works in a vacuum. Both are comprised of member States and observers - indeed, in most cases the same States, and both report in extenso to the General Assembly to ensure that all nations are aware of their activities. We understand calls for the need for coordination between the two, but we wonder whether any formal mechanism for coordination is really necessary.

In conclusion, for the reasons I have just mentioned my delegation fails to understand why we need to have this particular debate about the competence of the two bodies repeated in what I think is a sterile way, year in and year out, wasting time that would better be spent on discussing more productive ways to maintain outer space for peaceful purposes. It is our view that if both bodies pursue their primary tasks, any interconnected issues will take care of themselves in the natural course of negotiations.

Mr. ZAWELS (Argentina)(interpretation from Spanish): With regard to agenda item 6, "Ways and means of maintaining outer space for peaceful purposes", I should like to point out that the Republic of Argentina continues to believe that we must prevent outer space being used for the arms race and

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military confrontation and that it considers that the most appropriate way of maintaining outer space for peaceful purposes is through international cooperation. International cooperation builds confidence between Governments and promotes transparency in space activities.

I should like to expand briefly on what I have just said. Today we can say with great satisfaction that we are witnessing the end of the so-called cold war and the beginning of a new era - one we all hope will enable mankind to get down to facing the formidable challenge of development. Operative paragraph 24 of General Assembly resolution 45/72, with which we are all familiar, urges all States, in particular those with major space capabilities, to contribute actively to the goal of preventing an arms race in outer space as an essential condition for the promotion of international cooperation in the exploration and uses of outer space for peaceful purposes.

There are two United Nations forums that deal, albeit from different angles, with aspects of outer space and its uses for peaceful purposes: the Committee on the Peaceful Uses of Outer Space and the Ad Hoc Committee on the Prevention of an Arms Race in Outer Space of the Conference on Disarmament. We believe that we should avoid an overlap of efforts; but we do not question that each has a specific role to play, even though, as the representative of Australia just pointed out, we do not know exactly what the dividing line between them is. We do, however, believe that both forums are complementary and that it would be appropriate to have an exchange of information between them on their respective activities.

I would therefore suggest the following practical measure, which we believe does not imply any formalization of the situation. You, Mr. Chairman, could, circumstances permitting, report to the Ad Hoc Committee on our

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activities here that you feel might be of interest within the context of the Conference on Disarmament, and, similarly, the Chairman of the Ad Hoc Committee could report to us on the work of that body on aspects he feels might be of interest to us within the context of our work. In this connection we might usefully recall that at its last session the General Assembly adopted resolution 45/55. The resolution had been drawn up in the First Committee; part A is entitled "Prevention of an arms race in outer space", and part B, "Confidence-building measures in outer space". We also believe it worth mentioning that in the Ad Hoc Committee of the Conference on Disarmament my country submitted a working paper containing proposals for strengthening the regime set up by the Convention on the Registration of Objects Launched into Outer Space as a confidence-building measure. That Convention, it will be recalled, was elaborated by the Committee on the Peaceful Uses of Outer Space in 1975.

As I pointed out earlier, the most appropriate way to maintain outer space for peaceful purposes is international cooperation, and that through international cooperation confidence can be built up. We therefore hope that when document A/AC.105/C.2/L.182 is considered - a document submitted by nine countries, including Argentina, to the last session of the Legal Subcommittee - the matter now before us will be borne in mind.

(Mr. Zawels, Argentina)

We all agree on the importance, indeed the priority, of this subject. However, a perusal of previous reports produced by the Committee could well suggest quite the opposite. We therefore believe that the time has come to comply with our mandate, and we urge that the constructive and positive spirit prevailing in other United Nations bodies prevail here as well when we consider this and the other items on our agenda. If that is the case, the Committee can count on my delegation's enthusiastic cooperation.

REPORT OF THE SCIENTIFIC AND TECHNICAL SUBCOMMITTEE ON THE WORK OF ITS TWENTY-EIGHTH SESSION (A/AC.105/483)

IMPLEMENTATION OF THE RECOMMENDATIONS OF THE SECOND UNITED NATIONS CONFERENCE ON THE EXPLORATION AND PEACEFUL USES OF OUTER SPACE

The CHAIRMAN: I now call upon Mr. Adigun Abiodun, the United Nations Expert on Space Applications.

Mr. ABIODUN (United Nations Expert on Space Applications): As members are well aware, and as I have reported to this body and its Scientific and Technical Subcommittee over the years, the implementation of the activities of the United Nations Programme on Space Applications is being carried out with the financial and material support of a number of Member States, intergovernmental and non-governmental organizations, including the United Nations system, and a large array of distinguished scientists around the world, including hundreds - if not thousands - of beneficiaries of the Programme's activities. It is therefore a privilege for me to be here, and it is on behalf of the Space Applications Programme's global community that I wish to congratulate you, Sir, on your unanimous and well-deserved election as Chairman of the Committee on the Peaceful Uses of Outer Space. As the mantle of this great office passes into your able hands, my colleagues and I are fully confident that the Programme will continue to benefit from your personal

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support and guidance, as well as from the support of your Government, our kind host for these meetings.

Furthermore, on behalf of the Space Applications Programme's global community, I wish to express our sincere thanks to Ambassador Jankowitsch for his kind assistance and for the regular appeals he made to Member States in support of the Programme when he was Chairman of the Committee. I hope that you will convey to him our warm and best wishes in his new endeavours.

With reference to our work, I wish to thank you, Mr. Chairman, for giving me this opportunity, during the Committee's consideration of items 7 and 9 on its agenda at its current session, to address the delegations assembled here on the activities of the Programme. My statement will focus, in part, on the activities and direction of the Programme during the period 1990 through 1992. Details of those activities are contained in my report, which is now before the Committee in document A/AC.105/478.

I shall also address the status of United Nations participation in International Space Year and shall reflect on the efforts that have been undertaken by the Programme to date.

My first point deals with the long-term fellowship programmes for in-depth training. In 1990 the Programme received 39 long-term fellowship offers. These included offers from the Governments of Austria for two fellowships; ten from the Government of Brazil; two from China; 21 from the Union of Soviet Socialist Republics and four from the European Space Agency (ESA). The fellowship awards are for studies in microwave and remote-sensing technology, basic space sciences, geodesy, cartography, aerial photography, satellite meteorology and communication systems and space engineering. Details of the offers are set forth in the annex to my report.

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I am also happy to report that the fellowship awards are being renewed by the offering States and by the European Space Agency for the 1991 to 1992 period.

In 1990, the Programme also organized one training course on educating the educators and two workshops on space communications and microwave remote sensing. In addition, the United Nations, in collaboration with the Food and Agriculture Organization (FAO), co-sponsored an International Training Course on Agricultural Applications of Remote Sensing, at Prague, Czechoslovakia. The United Nations, in cooperation with FAO, the European Space Agency and the Government of France, also co-sponsored an International Remote-Sensing Workshop entitled "Geo-Information Technology for Decision Makers," held at FAO Headquarters in Rome.

The training course on educating the educators, which was hosted, co-sponsored and financed by the Government of Sweden and was held from 14 May through 15 June 1990, was organized to develop the practical knowledge and skills of educators from African States in remote-sensing technology. The Space Communications Workshop held at Havana, Cuba, from 26 to 30 March 1990 was organized to provide an opportunity for the exchange of information on the technical and operational issues associated with various international and regional satellite communications systems and services. The Microwave Remote Sensing Technology Workshop, co-sponsored by the United Nations, FAO and the European Space Agency, and organized in cooperation with the Government of Brazil, from 19 through 23 November 1990, exposed participants from the Economic Commission for Latin America and the Caribbean (ECLAC) region to the various aspects of current and future microwave remote-sensing systems, including the acquisition, processing, archiving and applications of the data

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generated by such systems. Details of all those activities are contained in documents A/AC.105/463, 469 and 471, as well as in paragraphs 27 through 32 of my report (A/AC.105/478).

The schedule of training courses and workshops planned for 1991 is shown in paragraphs 33 (a) through (g) of my report. They include the following:

First, a United Nations/European Space Agency workshop on basic space science, successfully hosted and co-sponsored by the Government of India, was held at the Indian Space Research Organization (ISRO) Headquarters at Bangalore, India, from 30 April through 3 May of this year for the benefit of member States in the regions of the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic Commission for Africa (ECA) and the Economic and Social Commission for Western Asia (ESCWA).

Second, this year we are organizing the third United Nations/ESA and FAO Workshop on Microwave Remote Sensing Technology, which is being hosted and co-sponsored by the Government of Spain and which will be held at the Maspalomas Station of the National Institute for Aerospace Technology (INTA) at the end of this session of the Committee on the Peaceful Uses of Outer Space for the benefit of member States in the ECA and ESCWA regions.

Third, a United Nations International Training Course on Remote Sensing Applications for Environmental Assessment and Monitoring is being sponsored, funded and hosted by the Government of the United States of America and will be held at the EROS Data Center, Sioux Falls, South Dakota, in September of this year. There have been many applicants for this particular training course.

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Fourth, the United Nations, the United Nations Environment Programme (UNEP), the Food and Agriculture Organization of the United Nations (FAO) and the Economic Commission for Africa (ECA) have organized a Regional Seminar on Remote Sensing for Decision-Makers, which has been organized for the benefit of ECA member States and which will be held at the UNEP Headquarters in Nairobi, Kenya, in August of this year.

Fifth, there is also a Workshop organized by the United Nations, the World Meteorological Organization (WMO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Office of the United Nations Disaster Relief Coordinator (UNDRO) and the Economic and Social Commission for Asia and the Pacific (ESCAP) on the Application of Space Techniques to Combat Natural Disasters, which will be hosted and co-sponsored by the Government of China and held at Beijing in September of this year.

Sixth, the seventh UN/FAO/WMO/European Space Agency (ESA) training course on the Applications of Remote Sensing in Agrometeorological and Hydrological Studies is being organized for the benefit of the member States of the Economic Commission for Latin America and the Caribbean (ECLAC) and will be held at Lima, Peru, in October of this year.

Lastly, the third United Nations International Training Course on Remote Sensing Applications to Geological Sciences is to be held in Germany at the Institute for Physics of the Earth at Potsdam and at the Free University of Berlin in September-October of this year. Owing to lack of funds, the organization of the fifteenth UN/FAO training course, identified in paragraph 33 (c) of my report, has been cancelled.

The seminars, conferences and workshops proposed for 1992 will focus on remote sensing technology applications for environmental assessment and global

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change, agrometeorological and hydrological studies and remote sensing education for educators. Other topics will include satellite communications, regional communications, basic space science and bridging the information gap in space science and technology. The latter is being co-sponsored by the International Centre for Theoretical Physics in Trieste, Italy. Details of these are contained in paragraph 34 of my report. Furthermore, I wish to inform the Committee that since the conclusion of the Scientific and Technical Subcommittee session early this year the Programme has received offers of voluntary contributions from the Governments of Sweden and Japan, respectively, to co-sponsor and fund the following activities in 1992, namely, the second United Nations International Training Course on Remote Sensing Education for Educators in Stockholm and Kiruna, Sweden, next year and a United Nations Regional Workshop on Space Technology for Resource Development and Environmental Management, which will be hosted by the Government of Ecuador in collaboration with the Cotopaxi Ground Receiving Station outside Ecuador in March of next year.

In addition, the Government of Indonesia has invited the United Nations to co-sponsor in 1993 a regional Conference on Space Technology for Sustainable Development to promote long-term cooperation in all aspects of space science and technology among the Asian and Pacific Rim countries.

The Programme has also received a request from the ECA for support in organizing an Africa Space Conference, with emphasis on addressing Africa's management needs. However, owing to the Programme's heavy work schedule for 1992 that particular activity is now also scheduled for 1993. As part of the activities of the Programme for 1993, the Government of Greece will also host

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and co-sponsor a United Nations International Seminar on Space Communications Systems.

With regard to technical advisory services, in 1990 the Programme provided technical assistance as follows: first, to the Secretariat of the Indian Ocean Marine Affairs Cooperation (IOMAC) in the planning of oceanographic and marine pilot projects to be carried out with funding support from the United Nations Development Programme (UNDP) and technical support from the Government of France; secondly, the ECA and the Governing Council of the Regional Centre for Services in Surveying, Mapping and Remote Sensing in Nairobi has invited the Programme to carry out an evaluation mission to the centre in Nairobi, which has been successfully completed; thirdly, the United Nations and ESA have also completed their joint survey of potential projects that could benefit from remote sensing data, both existing and future, to be made available by ESA to States members of the ECA region from the facilities of ESA's ground receiving stations in Maspalomas and Fucino; and, fourthly, the Programme is assisting the Centro de Levantamientos Integrados de Recursos Naturales por Sensores Remotos (CLIRSEN) of Ecuador to ensure a full utilization of the services of its Cotopaxi Ground Receiving Station.

In the past few years I have personally addressed the Committee on one of the mandates of UNISPACE 82, namely, the mandatory programme to assist the developing countries to develop their indigenous capability. This particular activity has over the years become the cornerstone of the efforts of the Programme, and as members will remember, last year the General Assembly, in resolution 45/72, endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that the United Nations should lead, with the active

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support of the specialized agencies and other international organizations, an international effort to establish regional centres for space science and technology education in existing national/regional educational institutions in the developing countries.

Based on the Committee's recommendation the United Nations has communicated the decision of the General Assembly on these Centres to all Member States and has requested them to participate in and financially and materially support their establishment. It also brought the above recommendation of the Committee to the attention of the Executive Secretaries of the Economic Commissions and has requested them to ascertain the interest of Member States in their respective region in hosting these Centres. I am very happy to report to the Committee that the United Nations has received an adequate number of official notifications of interest to host the Centres from various member States of each of the Economic Commissions. In this connection, a working project document for the establishment of the Centre for Space Science and Technology Education in each of the four economic regions, which is now on display here outside the conference room, has been forwarded to all United Nations Member States. A number of Member States have already indicated an interest in hosting the Centres and are anxiously awaiting an evaluation mission, which will be undertaken as the next phase of this particular activity. Such an evaluation mission has been undertaken in order specifically to ascertain the level of readiness of Member States to host the Centres.

I should also like to remind the Committee that in July of 1989, at Paris, the Joint Communiqué of the Economic Summit concluded that

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"Decisive action is urgently needed to understand and protect the Earth's ecological balance. ... We urge all countries to give further impetus to scientific research on environmental issues, to develop necessary technologies and to make clear evaluations of the economic costs and benefits of environmental policies."

An effective contribution from the developing countries to the solution of the aforementioned global concerns articulated at the Summit Meeting requires highly skilled and knowledgeable specialists who can fruitfully exploit the copious data from current and future advanced satellite systems. Accordingly, an in-depth and long-term education programme that is not limited to technology applications but that can also provide opportunities for technology development is essential for the development of such a work force. The Outer Space Affairs Division, the regional Economic Commissions and other entities of the United Nations system, particularly the UNDP, FAO, UNESCO and WMO, are participating in the establishment of these Centres. The United Nations and its specialized agencies attach major importance to their viability. The support of Member States for the establishment of the Centres is not only essential but of paramount importance.

In this connection efforts are being initiated by the Outer Space Affairs Division to liaison between the Centres and appropriate research and educational institutions in different parts of the world. The Outer Space Affairs Division is also energetically campaigning within the international community for necessary financial and technical assistance for the Centres. In this connection as well, and before I came to Graz for this session of the Committee, I called upon a number of capitals in Europe to seek necessary financial and technical support for the Centres. I shall continue on that

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path after the conclusion of this meeting with visits this year to more capitals in Europe, North America, Asia and Australasia in order to make the Centres a reality. In addition, we shall also be sending evaluation missions to developing countries to assess the viability of the facilities that are being provided by individual Member States. We strongly believe that the successful implementation of the Centres' Programmes will enable non-space-faring nations to participate in the global activities that were described at the Paris Summit Meeting in July 1989 and thus ensure their contribution, in some measure, to the safety of our fragile spaceship Earth for future generations.

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Concerning space information, last year the first publication in the series entitled "Seminars of the United Nations Programme on Space Applications" was made available to the members at the 1990 session of the Scientific and Technical Subcommittee and this Committee. The second publication in this series, document A/AC.105/468, focuses on remote-sensing technology and satellite communications and is already available to representatives. The next publication will be prepared for the 1992 sessions of the Scientific and Technical Subcommittee and the main Committee.

Plans are under way to issue a revised version of document A/AC.105/432 - "Directory on Education, Training, Research and Fellowship Opportunities in Space Science and Technology and its Applications" - and of document A/AC.105/397/Rev.1 - "Directory on Information Systems on Space Science and Technology".

As for the promotion of greater cooperation in space science and technology, I am happy to report that the activities carried out under the auspices of the Programme in 1990 included the co-sponsorship with the Committee on Space Research (COSPAR) of the Scientific Panel on Equatorial Electrojet and Related Phenomena during COSPAR's twenty-eighth plenary meeting in the Hague in 1990. The Programme also co-sponsored, with the International Aeronautics Federation (IAF), the Special Current Event Session on "Space and Forest Management" during the forty-first IAF Congress held in Dresden, Germany, in October 1990. The Programme will co-sponsor, with IAF and the Government of Canada, a workshop on "Space Technologies for Development" during the forty-second IAF Congress to be held in Montreal, Canada, this year.

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In August next year, the Programme will also co-sponsor a special workshop on "Space Technology in Developing Countries - Making It Happen". I will talk about "Making It Happen" later on in this presentation. This particular workshop is being organized in collaboration with COSPAR and IAF during their joint World Space Congress in Washington, D.C. The Programme will also co-sponsor, with the International Society for Photogrammetry and Remote Sensing (ISPRS) a two-day workshop on data-analysis methods and applications during the seventeenth ISPRS Congress, also to be held in Washington, D.C. in August 1992.

For us to be able to carry out the activities we are undertaking and those we have proposed and the Committee has accepted, as well as those that are being resubmitted, will depend largely on voluntary contributions. Thus, the United Nations wishes to express its gratitude to Member States, regional and international organizations, the United Nations agencies, the non-governmental organizations and many dedicated experts and individuals for assisting and cooperating with the Programme in achieving its objectives in 1990. These support sources are summarized in paragraph 52 of my current report.

Specific support received in 1990 and 1991 by the Programme included defraying the local costs of long-term fellowships; co-sponsorship of training courses and workshops organized by the Programme; sponsorship of experts to serve as lecturers in the activities described above; and voluntary cash contributions. In this connection, significant support for the activities of the Programme was received from the following Member States, international and regional organizations and entities: Austria, Brazil, Canada, China, Cuba, Czechoslovakia, France, the Federal Republic of Germany, Italy, Norway,

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Pakistan, Spain, Sweden, and the Union of Soviet Socialist Republics, as well as the European Space Agency (ESA), the Food and Agriculture Organization of the United Nations, the United Nations Development Programme, the United Nations Educational, Scientific and Cultural Organization, the World Meteorological Organization, and the Economic and Social Commission for Asia and the Pacific.

It is also my pleasure to inform the Committee that voluntary cash contributions in support of the 1990 activities of the Programme were received from the Governments of Austria ($9,000) and Pakistan ($12,000), and ESA ($25,000). I am also happy to report that the Governments of Greece and Pakistan, as well as ESA, have made voluntary cash contributions in the amounts of $7,000, $12,000 and $75,000 respectively in support of the 1991 activities of the Programme. I wish to take this opportunity to express the appreciation and gratitude of the United Nations and my own personal thanks for the aforementioned cooperation with and genuine support for the Programme.

Earlier in my presentation, I indicated that next year, with COSPAR and IAF, we will be focusing on "making it happen". In this connection, I wish briefly to talk about what I call the consolidation of efforts. As members are well aware, from time to time it is natural that we should reflect on the impact on Member States of the activities that are conducted under the auspices of the Programme. For us, this is an ongoing process. I wish to draw the attention of members to document A/AC.105/473, which provides detailed information on the workshops, courses, seminars and meetings of experts that have been organized from 1983 through 1990 - that is, since the conclusion of UNISPACE 82 - under the auspices of the Programme. The

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reports on these activities were presented to the Committee during the aforementioned period.

In our latest reflection on these activities and recommendations, we have come to appreciate that a few of the activities of the Programme have resulted in a number of practical and development-oriented projects that have attained different levels of implementation. A number of these projects are still on the launching pad. However, a few have taken off and are in the first stage of maturation, while others have completed the first stage and are moving into different phases of their development. The activities concerned and the entities responsible for these developments are as follows.

In cooperation with the Economic Commission for Africa, the Programme developed in 1987 a project proposal for the establishment of a Remote-Sensing Information Programme for Africa. The United Nations is pleased to note that, as a result of this United Nations initiative, MacDonald Dettwiler, a major private comnpany in Canada, has enhanced this proposal as a Canadian initiative for African development under the title "The Pan-African Remote-Sensing Information System". The United Nations looks forward to the implementation of this project.

As a result of the recommendations of the UN/FAO/UNDP/ESA Meeting of Experts sponsored by the Government of Spain and held in Maspalomas, Canary Islands, the European Space Agency has since offered to make available from its ground receiving stations in Maspalomas, and in Fucino, Italy, existing and future remote-sensing data that could be used to support development programmes in some of the African countries that are covered by the two ground stations. Efforts are in progress to review the projects that will benefit

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from the aforementioned ESA support and to plan the education programme that could support these projects.

The recommendations of the United Nations meetings of experts held in Sri Lanka and Pakistan in 1986 and 1989 respectively have since resulted in the formulation of oceanographic and marine pilot projects in Indonesia, Sri Lanka and Tanzania, with funding support from UNDP and technical support from the Government of France for their implementation.

These activities, including the Ibero-American Meeting on Communications for Cooperation hosted by the Government of Spain in June 1990 - a meeting that resulted from the recommendations of the workshop on communications organized in Cuba in 1990 - as well as the efforts of the United Nations and the international scientific community in the establishment of the Centres for Space Science and Technology Education, represent a number of programmes that have graduated from being recommendations of the meetings and workshops of the Programme into practical, realistic and achievable activities. Many others are contained in the various reports on the activities of the Programme as enumerated in document A/AC.105/473. These can attain similar status.

Thus, the United Nations welcomes the full participation and contribution of Member States and intergovernmental and non-governmental organizations in the translation - not just noting - of the recommendations that have emanated to date from the activities of the Space Applications Programme into operational programmes.

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In conclusion, I wish to address the mandate which the Committee recommended to the General Assembly and which came through a resolution of the General Assembly in 1989 concerning International Space Year. In this connection, in his note verbale SAP/90/L.66, dated 17 December 1990, the Secretary-General officially informed all Member States of the decision of the General Assembly on the participation of the United Nations in International Space Year. A copy of the United Nations publication "Guide to the Participation of the United Nations in International Space Year (ISY) - 1992" accompanied this note verbale. Copies of the second edition of this guidebook are now before the Committee. The specific elements of the Space Year activities and the entities that are collaborating with the United Nations in their implementation are shown in annex II, pages 22 through 25 of the second edition of this guidebook.

In his note verbale, the Secretary-General also emphasized that the aim of International Space Year activities is to encourage all countries not only to participate in the applications of space science and technology, but also to undertake programmes that can contribute to the understanding and management of the global environment, to the solution of local and transnational environmental problems, and to the development of the technology to meet local needs. International Space Year also offers the United Nations and the international community a unique opportunity to achieve major progress in the implementation of UNISPACE 82 recommendations. The Centres for Space Science and Technology Education show where such progress is needed.

I should also like to take this opportunity to highlight the status of a number of other International Space Year activities, particularly the "Home Planet" exhibition, which will be organized at United Nations Headquarters

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from June through September 1992, and such related projects as a live global telecast and the production of a series of videos. Consultations are currently in progress on these projects.

The "Home Planet" exhibition will be organized, as I have said, at United Nations Headquarters. It will be based on the best images of the Earth recorded by earth-observing satellites and on the wide spectrum of applications of these images throughout the world, as well as on photographs and videos taken from the unique vantage point of outer space by astronauts and cosmonauts, including a display of samples of the hardware and software that have made these efforts possible. The exhibition is intended to be a powerful and evocative tour of the Earth from space, consistent with the Year's theme, "Mission to Planet Earth", expanding the awareness of those seeing it of the interrelated elements of our home planet and inspiring them to appreciate more fully the bond between the Earth and all its inhabitants. I have given the dates of exhibition as June through September 1992. Initially, the exhibition was indeed scheduled to end in September, but as a result of interest that has been expressed, it has been extended to December 1992.

The telecast will be a mixture of events, including a possible address from United Nations Headquarters, a panel discussion with global satellite hook-ups so that experts/penalists in other locations outside New York can contribute to this event. The telecast will cover issues of the management of the global environment, with emphasis on the harnessing of the natural resources of the Earth for sustainable development; environmental pollution, land degradation and deforestation; potential damage to the ozone layer; and the long-term impact of global warming due to the greenhouse effect.

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I am pleased to report that the International Telecommunications Satellite Organization (INTELSAT) and the International System and Organization of Space Communication (INTERSPUTNIK) have agreed to provide their space signal channels free of charge for this telecast and to request their respective signatories also to provide free of charge the necessary ground services.

The video series will reflect the activities of mankind to date in space and the current and long-term benefits of these activities. The series will not only focus on the achievements of the spacefaring nations, but will also include the efforts of the developing countries in this arena. Specifically, highlights of the contributions of developing countries to the development and growth of this technology will be a major component of the video series. The activities of the United Nations system in space-related fields are very significant; these will also be reflected in the video series.

Other International Space Year activities are entering different phases of implementation, as indicated in the second edition of the guidebook before the Committee.

Finally, I should like to emphasize that the successful execution of all the Space Year and Programme activities of the United Nations will depend on generous voluntary contributions from Member States and international organizations and from other funding sources that are acceptable to the United Nations. In this connection, I wish to remind members of the Secretary-General's appeal, contained in his note verbale to which I have referred, for voluntary contributions to support United Nations Space Year activities. These funds are necessary if the activities of the Programme and those already planned for the participation of the United Nations in International Space Year are not to remain paper dreams.

The CHAIRMAN: While being encouraged by the active participation of Member countries in support of the Programme, I should like to draw the attention of the members of the Committee specifically to the conclusion of the Expert's report that financial support for the Programme is extremely important. Taking into account that the Programme on Space Applications constitutes one of the important decisions of UNISPACE 82, whose tenth anniversary we shall celebrate next year, I should like to encourage all delegations to follow, if possible, the recommendations of the Expert on Space Applications, who has done such valuable work, as outlined in his detailed report.

Mr. BUYCK (Belgium): As this is the first time that I have addressed the Committee, I have not yet had the opportunity to congratulate you, Sir, on behalf of my Government, on your election as the new Chairman of the Committee on the Peaceful Uses of Outer Space. I had specific instructions to support your candidacy and my Government's decision was based on your outstanding experience as well as on the important role Austria has always played and is still playing as a member country of this Committee. We know that very well because we are your alphabetical neighbour. We are convinced that your able chairmanship will contribute to the success of our meetings, now and in the future.

We would further like to express our gratitude, of course, to Mr. Jankowitsch for the dedication he showed during his 20 years as Chairman of the Committee.

Belgium's efforts and contributions to space research, pursued through the European Space Agency (ESA), are quite extensive. For example, Belgian

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enterprises participate in the construction of satellites. Moreover, my country is hosting one of ESA's stations for satellite tracking, and early this month five Belgian candidates were selected to compete with 55 other European candidates to become the first crew of ESA's space shuttle Hermes when it becomes operational.

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Belgium attaches great importance to the peaceful uses of outer space and follows with great interest the activities of the Committee on the Peaceful Uses of Outer Space. My country attends the yearly sessions of its Scientific and Technical Subcommittee and its Legal Subcommittee. We are generally satisfied with the work these Subcommittees have achieved, and in particular with the latest report of the Scientific and Technical Subcommittee.

I should like to mention two specific items that are of particular concern to Belgium and on which I shall express my Government's views. These items are the problem of space debris and the question of the safe use of nuclear power sources in outer space.

Concerning the problem of space debris, Belgium is aware that this question needs further thorough research. But in our opinion the time has come to think seriously about the elaboration of appropriate rules, which will constitute the legal framework to tackle this specific form of environmental pollution and to assure the safe use of satellites. Space debris might seem a distant problem with no direct danger for human life, at least on Earth, but the more debris that is created, the greater the possibility of accidents by collision - accidents that might endanger human life, in space as well as on Earth, especially when they involve space objects containing radioactive material. In the long run, space debris might create a threat to the natural environment on Earth.

Last year, the General Assembly in its resolution 45/72 judged that it was of the utmost importance that Member States pay more attention to the problem of space debris. My Government would like to see this kind of recommendation reiterated by the General Assembly at its next session. It would be very unwise to let the problem of space debris grow beyond our

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control. We must contemplate the codification of this subject in order to be better able to handle it.

The safe use of nuclear power sources in outer space is another important subject, which will be discussed in greater detail, I suppose, when the report of the Legal Subcommittee is under consideration. Currently, that Subcommittee is working the finalize the draft principles.

My Government was satisfied that progress was made on principles 8 and 9 dealing with international responsibility and compensation. We even hope that, perhaps here in Graz, agreement can be reached on these principles. However, we are very disappointed that the consensus reached last year on principle 3, which deals with the criteria for safe use, has been called into question during this year's session of the Legal Subcommittee. we would like to recall that the Committee has been considering the question of the safe use of nuclear power sources for 12 years now, and no agreement has yet been reached. Time is pressing.

Finally, next year is an important year for our Committee: 1992 has been proclaimed International Space Year. At the same time, we will celebrate the tenth anniversary of UNISPACE 82. Next year will therefore present the Committee with an ideal opportunity to seek international attention. We sincerely hope that this may create a momentum for the Committee that could be transformed into positive results. In no way does this mean that Belgium has already given up hope for this year's session. On the contrary, we are confident that we can make a success of the current session, but that we must thereby try to avoid such rather unhappy friction as occurred during yesterday afternoon's meeting. Please let us all take a constructive attitude. A successful session this year would make a wonderful running start for International Space Year next year.

Mr. PEREK (Czechoslovakia): I should like to comment on the report of the Scientific and Technical Subcommittee, in particular on paragraphs 105 through 110 dealing with the protection and preservation of space and Earth environment.

As I mentioned in the general debate, my delegation is of the opinion that the time has already come to discuss in this Committee and its Subcommittees the subject of space debris and its possible harmful interference with spacecraft used for the exploration and peaceful uses of outer space.

It is evident from the documents before us that some delegations at the meeting of the Scientific and Technical Subcommittee were in favour of including the matter of space debris on the agenda. And here, quite a few delegations have expressed the same or a similar opinion in the general debate, and many more have been concerned about the adverse effects of space debris on the space environment.

In past years, many papers on space debris were presented at the Congresses of the International Aeronautics Federation and the Committee on Space Research, in such periodicals as Space Policy, in such monographs as Space Debris by McKnight and Johnson, and in the authoritative studies of official institutions. Their authors or teams of authors came from many countries - testimony to the worldwide interest of the scientific, legal, and international communities in these matters.

If one looks at individual papers or studies, one finds very similar conclusions, which suggest the generation of as little new debris as possible, the removal of satellites near the end of their useful lifetimes from the orbital lanes of active satellites, the prevention of spacecraft explosions, and so on. This means that the problem of space debris is well understood in

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its general features, which indicates in turn that the time is right for starting a meaningful discussion on space debris as an item on the agenda of this Committee and its Subcommittees, just as the General Assembly stipulated in its most recent resolution on outer space.

The question of discussing outer space matters in the United Nations is not new. It arose for the first time in 1957 after the launch of the first artificial satellite. The United Nations of that time reacted swiftly. An ad hoc committee was created only 14 months later, at a time when only 10 artifical satellites were in orbit and very little was known about outer space. Today, we have close to 7,000 trackable space objects, some 50,000 non-trackable pieces of debris, hundreds of scientific papers, and at least a dozen studies before this Committee, and we are still waiting for more papers, more studies, and more debris.

My delegation's proposal is being put forward in the spirit of international cooperation, in the hope that it will be received as such. The only motivation behind the proposal is the strength of scientific facts.

Mr. KOZYREV (Union of Soviet Socialist Republics) (interpretation from Russian): In our view, the work of the Scientific and Technical Subcommittee this year was fruitful, and the results achieved offer good prospects for its future activities in promoting and strengthening international cooperation.

As we know, the Subcommittee gave priority to the implementation of the United Nations Space Applications Programme and the recommendations of UNISPACE 82. We have often said that an effective solution to these issues requires a shift to broad cooperation in space activities. The Soviet Union has always worked actively to that end, and will continue to do so.

In 1992 we will celebrate the tenth anniversary of UNISPACE 82 and, in view of the rich experience that we have garnered during this decade, we believe that this is an excellent opportunity to assess the implementation of the recommendations of that Conference and to analyse them in depth. We welcome the decision taken by the Scientific and Technical Subcommittee to conduct an exchange of views on this issue during its next session and to request the United Nations Secretariat to prepare the necessary reference material.

A special place in the work of the Subcommittee was given to the issue of preparing and implementing the activities relating to International Space Year (ISY). If those activities are carried out, they could further promote broad international cooperation in the peaceful exploration of outer space for the benefit and in the interests of all countries and peoples.

We believe that the initiative regarding non-governmental organizations, which was approved and supported by the General Assembly, has gone beyond its relatively narrow original framework and is taking on an increasingly broader global importance.

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The preparation and implementation of activities related to ISY will provide yet another impetus to seek further means of interaction between countries in space exploration, of building confidence in space activities and of strengthening peace and security. In this regard, we note the appeal made by the forty-fifth session of the General Assembly to Member States and international organizations to consider supporting the Organization's efforts in declaring 1992 the International Space Year. We should like to reiterate our readiness to cooperate with other countries and organizations within the framework of ISY in order to achieve practical results in space science and technology.

The great importance that my country attaches to ISY is demonstrated by the establishment of a Committée on ISY-related activities, presided by the President of the Soviet Union, Mikhail Gorbachev. The committee also comprises Mr. Nazarbayev, President of the Kazakh Republic, from where Yuri Gagarin was launched into space, and Mr. Marchouk, President of the Academy of Sciences, and other prominent scientists.

At the end of March we finalized plans for wide-ranging activities on both the national and international levels, which will involve many Soviet research institutes and organizations. The Committee presided by Mr. Gorbachev requested these organizations to submit to the Cabinet of Ministers of the Soviet Union a programme of activities in preparation and implementation of ISY. The programme, which was approved, consists of three parts. The first, entitled, "Conferences, seminars, symposiums and meetings", includes such activities as an international symposium on the results of the exploration carried out by the Soviet Union via the satellite Cosmos, to be held in Leningrad in August 1991; the second, entitled, "Space craft launchings", includes the launching from 1991 to 1993 of three "Meteor"

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meteorological satellites carrying United States ozonometric equipment, as well as Soviet and French equipment; the third, entitled, "Public information activities" includes plans to issue a joint Soviet-American publication in 1992 entitled, "Achievements in and prospects for space biology and medicine". I am referring to these activities as examples of a broad programme. I will submit a detailed desciption of the programme to the secretariat of the Committee.

It is well known that the main instrument for the preparation of ISY is the Space Agency Forum. Three meetings of the Forum were held, in the United States in 1988, in Italy in May 1989 and in Japan in May 1990. A fourth Forum, concerning International Space Year, was held in Moscow from 16 to 17 May 1991; it was the most important event in planning and preparing the 1992 activities before the convening in Washington of the World Space Congress. The Moscow meeting was attended by more than 100 representatives of 25 countries and organizations members of the Forum. Seven countries and organizations attended as observers. Spain has become a member of the Forum, and UNESCO and INTERCOSMOS have become observers. The total membership is now 29, and the number of observers is 10.

The Forum conducted an overview of the work accomplished since the last meeting in Kyoto within the four-panel framework. It also planned the next series of activities, in particular, the projects for the panel on Earth science and technology. A total of 13 programmes is under way, three of which were formally approved at the Moscow meeting. These programmes deal with such issues as the global warning system, polar stratospheric ozone, deforestation and the monitoring of polar ice caps. The Forum also discussed programmes on education and technology. Six educational and technological projects are

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under way and, in all, 21 types of space education activities are being prepared. All 27 programmes were confirmed by the Forum.

COSPAR initiated the carry out of a set of experiments on space sciences. Thirty-eight projects were submitted, all of which were approved by the Forum. They include studies on astrophysics, microgravity, planetary exploration, space physics and Earth's atmosphere. Within the framework of ISY in 1992, the Forum approved the following activities: the European Conference, to be held in Munich from 30 March to 4 April 1992; the World Space Congress, to be held in Washington from 20 August to 9 September 1992; the Asian-Pacific Conference, to be held in Tokyo, Japan, in November 1992; and the International Conference to be held in Dnepropetrovsk, Soviet Union, in September 1992.

(Mr. Kozyrev, USSR)

One year has passed since the function of the international secretariat of SAFISY was transferred to Intercosmos of the Soviet Academy of Sciences. The Forum was welcomed by the President of the Soviet Union, who also expressed hope that the Moscow meeting will encourage many scientists to work together to study the Earth more effectively. It was recalled that the Soviet Union, together with other countries, celebrated the thirtieth anniversary of manned space flight and that the Soviet Union stood ready to participate in international space programmes for the benefit of mankind, as indicated by the activities planned in the Soviet Union in the run-up to and during International Space Year.

We believe that the recommendation issued by the forty-fifth session of the General Assembly to the Committee is of great importance. It urges us to pay more attention to all aspects related to the protection and the preservation of the outer space environment, especially those potentially affecting the Earth's environment. Moreover, we believe that it is timely and fitting that the Subcommittee changed the item on its agenda dealing with the study of the geosphere and biosphere; progress in national and international space activities related to the Earth's environment should be considered in a broader perspective. We hope that, as part of this item, it will be possible to focus our efforts on reviewing and assessing the possibility of joining space and ground-based infrastructures for systems of receiving, processing and transferring environmental data to users with existing systems in such countries as the United States, the Soviet Union, India, Japan, France and other countries. The issues of environmental monitoring certainly have a very pronounced space dimension. We are of course referring to the increasing pollution of the environment near Earth by artificial objects. During

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the sessions of the Scientific and Technical and of the Legal Subcommittees held this year, a number of delegations expressed concern about the threat posed by the growing amount of debris in the atmosphere. We share this concern, and support the proposal that the Committee and its bodies should pay more attention to the issue of environmental cleanliness in outer space. We believe that the inclusion on the agenda of the Scientific and Technical Subcommittee of the issue dealing with space debris is timely. A discussion of this issue would lead to better understanding of the problem of space debris, be of assistance to the Committee to make future plans regarding the international legal principles and standards governing space activities and help to minimize polluting outer space.

In conclusion, let me once again take up the issue which, we believe, is directly related to the problem of rationalization of working methods in the Scientific and Technical Subcommittee. I do not think it would be a mistake to say that there is a clear discrepancy between the number of items on the Subcommittee's agenda and the number of days allotted for their consideration. Not minimizing the significance and importance of all these questions, we cannot fail to note that the agenda is overloaded. I believe that setting priorities or reasonably rotating non-priority agenda items would help in further rationalizing the Subcommittee's work.

The meeting rose at 12.35 p.m.